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M	AA		Rai	-				and Walter Konhauser e n Systems, Artech House				on	
	АВ		Minin	num	Mean	-Squ	are Error Ed annels", <i>IEL</i>	Kaleh and Paul Walter Ba qualization for Multiuser C EE Trans. on Vehicular Te . 276-287, May 1996.	Detection	n in Cod	e-Div	ision	
	AC		Naf	Naja Klein, "Data Detection Algorithms Specially Designed for the Downlink of CDMA Mobile Radio Systems", <i>IEEE 47th Vehicular Technology Conference</i> , pp. 203-207, May 1997.									
	AD		Joint	H.R. Karimi and N.W. Anderson, "A Novel and Efficient Solution to Block-Based Joint-Detection using Approximate Cholesky Factorization", <i>Personal, Indoor and Mobile Communications PIMRC' 98</i> , Conference Proceedings, Vol. 3, pp. 1340-1345, Sept. 1998, Boston, MA.									
	AE			ETSI STC SMG2 Layer 1 Expert Group, "Low Cost MMSE-BLE-SD Algorithm for JTRA TDD Mode Downline", Tdoc SMG2 UMTS L1, Helsinki, Finland, Sept. 1998.									
Y	AF			3G TS 25.102 V3.4.0, 2000-10, "UTRA (TDD) Radio Transmission and Reception", 3rd Generation Partnership Project, Technical Specification Group RAN WG4, Annex B., pp. 37.									
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eww [AG	Sp	Displ	acem	ent S	tru	ctures", 20	Joint Detection with Cy 2000 IEEE International C Istanbul, Turkey, 5-9 J 00CH37100),	Conferenc	e on Ac	ousti
	АН	Pr	oakis					Processing, Macmillan 35, para. 11.3.1, page			
	ΑI			Radio	Syste	em	s", Interna	Using Fast Fourier Trantional Annual Conference para. II, page 3, para I	e of ICT	. 1999, _l	oage
	LA		Ac	cess	Scher	me	for UMTS's in Wireles	lutions for Joint Detect ', IEEE Signal Processin s Communications, Mar page 329, para. 2.	g Works	nop on S	igna

EXAMINER DATE CONSIDERED 2/2/06

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177	<i>y</i> ·	5,377,225	12/1994	Davis				_	
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PM	n			ir and Walter Konhauser editors on Systems, Artech House, Bos					
nn	7	Minimum Mean-Square E	rror Equalizat	Kaleh and Paul Walter Baier, "Zaion for Multiuser Detection in Co Lular Technology, Vol.45, No. 2, p	de-Divisio	n Multiple		ss	
KN				ially Designed for the Downlink on the Conference, pp. 203-20			lio Sy:	stems*,	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE February 21, 2002	GROUP 2667			
· (Use several sheets if necessary)		2661			
OTHER DOCUMENTS (Including	g Author, Title, Date, Pertinent Pages	s, Etc.)			
H.R. Karimi and N.W. Anderson, "A Approximate Cholesky Factorization", P Proceedings, Vo.		nications PIMRC' 98, Conference			
ETSI STC SMG2 Layer 1 Expert Group, Tdoc SMG2	"Low Cost MMSE-BLE-SD Algorithm UMTS L1, Helsinki, Finland, Sept. 1				
Partnership	RA (TDD) Radio Transmission and Reception*, 3rd Generation Project, Technical Specification Group AN WG4, Annex B., pp. 37.				
a time domain approach", IEEE Trans.	Inf. Theory (USA), IEEE Transaction	didentification and equalization based on second -order statistics: Theory (USA), IEEE Transactions on Information Theory, March 018-9448, VOL-40, NR 2, pages 340-349			
VTC 1999-Fall. IEEE VTS 50th. Ve	n Low Computational Complexity For Hybrid TD-CDMA Systems ^a icular Technology Conference. Gateway to the 21st Century Sept. 19-22, 1999, IEEE Vehicular Technology Conference, NY				
Vandaele P. et al. "Recursive Total Leas Proceedings: Vision, Image and Signal					
	cyclic Reduction Exploiting Displacement Structures®, 2000 IEEE s, Speech and Signal Processing, Istambul, Turkey, June 2000				
Proakis et al., "Digital Signal Processing"	, Macmillan Publishing Company, N 11.3.1, p. 890, para. 12.3.2	ew York, NY, 1992, p. 835, para.			
Vollmer et al., "Joint-Detection Using Fa International Annual Conference of ICT,					
Pigeonnat, "Alternative Solutions for Joi Signal Processing Workshop on Signal					

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